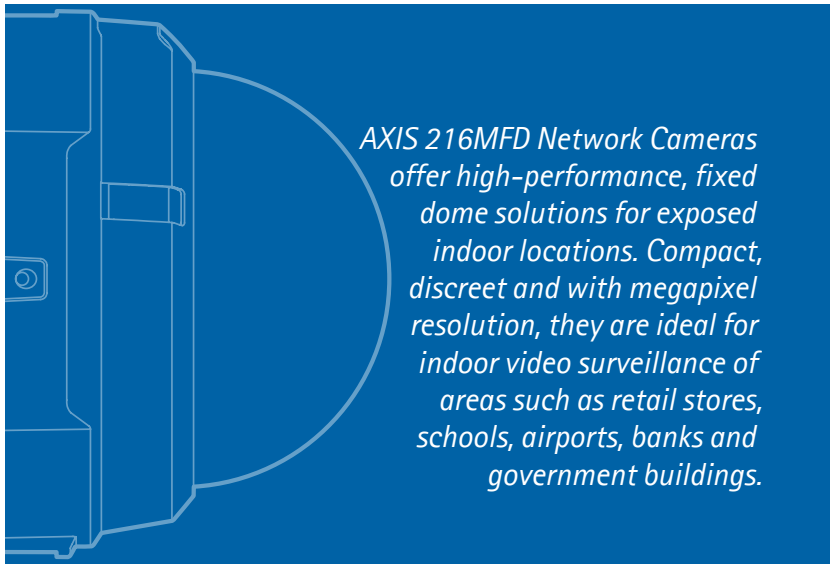
AXIS 216MFD/216MFD-V Network Cameras

Discreet video surveillance with exceptional image detail



AXIS 216MFD Network Cameras offer high-performance, fixed dome solutions for exposed indoor locations. Compact, discreet and with megapixel resolution, they are ideal for indoor video surveillance of areas such as retail stores, schools, airports, banks and government buildings.

MEGAPIXEL RESOLUTION >

Thanks to the 1.3 megapixel progressive scan sensor and advanced image processing, AXIS 216MFD Network Cameras deliver crisp and clear images, perfect for the identification of objects and persons.

SIMULTANEOUS MOTION JPEG AND MPEG-4 >

Simultaneous Motion JPEG and MPEG-4 video streams in full megapixel resolution allow for optimization of image quality and bandwidth efficiency.

DISCREET AND COMPACT DESIGN >

The vandal-resistant AXIS 216MFD-V, and AXIS 216MFD with its tamper-resistant casing, are fixed domes specifically adapted for discreet video surveillance in exposed indoor environments.

POWER OVER ETHERNET >

Power over Ethernet (IEEE 802.3af) supplies power to the cameras via the network, which eliminates the need for power cables and reduces installation costs.

TWO-WAY AUDIO SUPPORT >

Two-way audio support allows remote users to listen in on an area and communicate with visitors or intruders.

AXIS® COMMUNICATIONS

DISCREET VIDEO SURVEILLANCE WITH EXCEPTIONAL IMAGE DETAIL

AXIS 216MFD Network Cameras are discreet fixed dome cameras specifically adapted for indoor environments, designed for professional video surveillance. The AXIS 216MFD version offers a tamper-resistant plastic cover, whereas AXIS 216MFD-V features a rugged, vandal-resistant casing with a metal base specifically adapted for indoor environments subject to vandalism.

They both feature a 1.3 megapixel sensor that delivers crisp and clear images, perfect for the identification of objects and persons. The high-quality lens uses DC-iris control for adjusting the light level and improving the depth of field. AXIS 216MFD Network Cameras are ideal for video surveillance in locations such as retail stores, schools, airports, banks or government buildings.

The megapixel resolution allows important areas like entrances or checkouts to be monitored in great detail.

The increased resolution can also be used to provide a significantly larger overview. The inner rectangle below shows the area covered by an analog CCTV camera. With the same number of pixels per area, the full 1280x1024 resolution provided by AXIS 216MFD Network Cameras - the outer rectangle below - covers a three times larger scene.

SUPERIOR IMAGE QUALITY

PROGRESSIVE SCAN

With traditional interlaced scanning NTSC/PAL techniques, every image consists of two frames that are captured after each other and merged together. This results in degraded quality when freezing the image. AXIS 216MFD Network Cameras instead use progressive scan, capturing the full image at the same moment, which provides non-distorted, superior quality images with drastically reduced motion blur.

Interlaced scan, 20 ms difference between odd and even lines

Progressive scan, all lines are captured at the same time

SIMULTANEOUS MOTION JPEG AND MPEG-4

AXIS 216MFD Network Cameras offer simultaneous Motion JPEG and MPEG-4 video streams in full 1.3 megapixel resolution. The video streams can be optimized for image quality and bandwidth efficiency by configuring the frame rate, resolution, compression level and format – offering up to 12 frames per second in full 1280x1024 resolution and 30 frames per second in 800x600 resolution (partial scan).

EASY INSTALLATION

AXIS 216MFD Network Cameras are quick and easy to install on wall, hard or drop ceiling. They allow versatile adjustment by panning, tilting and rotating the varifocal lens to any camera angle. Smoked transparent cover and drop ceiling mount kit are options for making the AXIS 216MFD Network Cameras more discreet.

POWER OVER ETHERNET

Power over Ethernet allows power to be delivered to the AXIS 216MFD Network Cameras via the network, reducing cabling requirements and installation costs. This also means that continuous power can be guaranteed by the use of a UPS (Uninterruptible Power Supply).

TWO-WAY AUDIO SUPPORT

The audio support includes the option of using the built-in microphone or connecting external speakers and microphones. This enables remote users to listen in on an area and communicate instructions, orders or requests to visitors or intruders. Audio can be disabled when inappropriate.

ADVANCED SECURITY AND NETWORK MANAGEMENT

AXIS 216MFD Network Cameras offer a comprehensive set of network security features, such as multi-level password protection, IP address filtering, HTTPS encryption and IEEE 802.1X network access control.

IPv6 is supported in addition to IPv4, as insurance against the growing shortage of IP addresses, eliminating the need for network address translation and simplifying configuration in an IPv6-enabled network. Network utilization is optimized with the support for Quality of Service (QoS), which enables reservation of network capacity and prioritization of mission-critical surveillance in a QoS-aware network.

POWERFUL EVENT MANAGEMENT

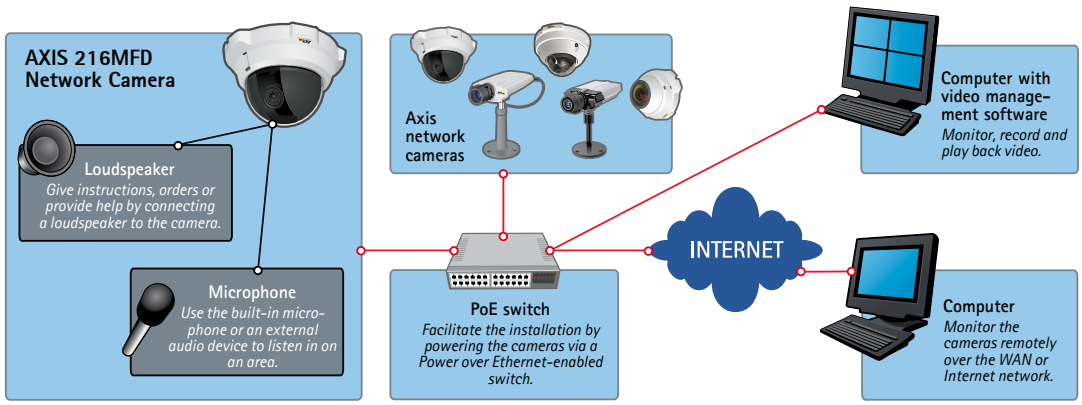
With AXIS 216MFD Network Cameras, video can be accessed at any time, from any computer anywhere. AXIS 216MFD Network Cameras also allow for powerful event management with multi-window motion detection, audio detection, active tampering alarm and I/O (input/output) for connecting devices such as external relays and sensors to activate lights or open/close doors.

Pre- and post-alarm buffering secures images just before and after an alarm. AXIS 216MFD Network Cameras are supported by AXIS Camera Station video management software, which offers remote video monitoring, recording and playback.

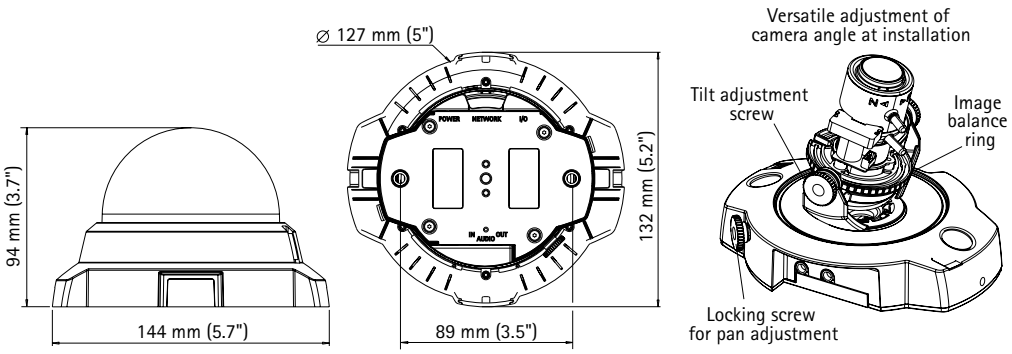
OPEN PROGRAMMING INTERFACE FOR CUSTOMIZED APPLICATIONS

AXIS 216MFD Network Cameras include VAPIX®, the industry-standard application programming interface (API) from Axis Communications, which facilitates the development of customized software solutions. The API ensures compatibility with the market's widest range of third-party video management software, available from Axis Application Development Partners.

A TYPICAL INSTALLATION


AXIS 216MFD Network Camera
Loudspeaker
Give instructions, orders or provide help by connecting a loudspeaker to the camera.
Microphone
Use the built-in micro-phone or an external audio device to listen in on an area.
Axis network cameras
PoE switch
Facilitate the installation by powering the cameras via a Power over Ethernet-enabled switch.
INTERNET
Computer with video manage-ment software
Monitor, record and play back video.
Computer
Monitor the cameras remotely over the WAN or Internet network.

DIMENSIONS



TECHNICAL SPECIFICATIONS – AXIS 216MFD/AXIS 216MFD-V NETWORK CAMERAS

Models	AXIS 216MFD: Tamper-resistant casing AXIS 216MFD-V: Vandal-resistant casing
Image sensor	1/3" Micron Progressive Scan RGB CMOS 1.3 Megapixel
Lens	Fujinon 2.8 - 10 mm, F1.3, DC-iris Focus range: 0.3 m to infinity
Angle of view	27°-100° horizontal
Camera angle adjustment	Pan 360°, tilt 170°, rotation 340°
Minimum illumination	2 lux, F1.3
Video compression	Motion JPEG MPEG-4 Part 2 (ISO/IEC 14496-2) with motion estimation, Profiles: ASP and SP
Resolutions	24 resolutions from 1280x1024 to 160x90 via API 23 selections via configuration web page
Frame rate	Motion JPEG: Up to 12 fps at 1280x1024 20 fps at 1024x768* 30 fps at 800x600* MPEG-4: Up to 8 fps at 1280x1024 13 fps at 1024x768* 20 fps at 800x600* *Partial scan takes the data from the center region of the sensor and scales it down to present an image at optimal frame rate.
Video streaming	Simultaneous Motion JPEG and MPEG-4 Controllable frame rate and bandwidth Constant and variable bit rate (MPEG-4)
Image settings	Compression levels: 100 Rotation: 0°, 180° Mirroring Configurable color level, brightness, sharpness, white balance, exposure control, fine tuning of behavior at low light Overlay capabilities: time, date, text, image or privacy mask
Shutter time	1/15000 s to 1/4 s
Audio	Two-way (half duplex), one-way or audio off Built-in microphone, external microphone input or line input Mono audio output (line level) connects to active speaker with built-in amplifier Audio compression: AAC LC 8 kHz 32kbit/s G.711 PCM 64 kbit/s G.726 ADPCM 32 or 24 kbit/s
Security	Multiple user access levels with password protection IP address filtering HTTPS encryption IEEE 802.1X network access control User access log
Users	20 simultaneous users Unlimited number of users using multicast (MPEG-4)
Alarm and event management	Events triggered by video motion detection, audio detection, active tampering alarm, external input or according to a schedule Image upload over FTP, email and HTTP Notification over TCP, email, HTTP and external output Pre- and post alarm buffer: up to 20 MB (250 images or more, in full 1280x1024 resolution)
Connectors	RJ-45 for Ethernet 10BaseT/100BaseTX DC jack Terminal block for 1 alarm input and 1 output 3.5 mm jack for Mic in (max 80 mVpp) or Line mono input (max 6.4 Vpp) 3.5 mm jack for Line mono output (max 1.3 Vpp) to active speaker

Casing	AXIS 216MFD: Polycarbonate base and polycarbonate transparent cover AXIS 216MFD-V: 1000 kg (2200 lbs) impact-resistant casing with metal base and rugged polycarbonate transparent cover Tamper-proof mounting on wall, hard or drop ceiling
Processors and memory	CPU, video processing and compression: ARTPEC-A RAM: 64 MB Flash: 8 MB Battery backed-up real-time clock
Power	4.9- 5.1 V DC max 3.8 W Power over Ethernet (IEEE 802.3af) Class 1
Operating conditions	0–50 °C (32–122 °F) Humidity 20-80% RH (non-condensing)
Installation, management and maintenance	AXIS Camera Management tool on CD, and web-based configuration Configuration of backup and restore Firmware upgrades over HTTP or FTP, firmware available at www.axis.com
Video access from web browser	Camera live view Video recording to file (ASF) Sequence tour for up to 20 Axis video sources Customizable HTML pages
Minimum web browsing requirements	Pentium III CPU 500 MHz or higher, or equivalent AMD 128 MB RAM DirectX 9 compatible graphics board, Direct Draw Windows XP, 2000, Internet Explorer 6.x or later For other operating systems and browsers see www.axis.com/techsup
System integration support	Open API for application integration including VAPIX® from Axis Communications*, AXIS Media Control SDK*, event trigger data in video stream Quality of Service (QoS) Layer 3, DiffServ Model Embedded Linux operating system ** Available at www.axis.com*
Supported protocols	IPv4/v6, HTTP with Digest Authentication, HTTPS, SSL/TLS*, TCP, QoS, SNMPv1/v2c/v3 (MIB-II), RTSP, RTP, UDP, IGMP, RTCP, SMTP, FTP, ICMP, DHCP, UPnP, Bonjour, ARP, DNS, DynDNS, SOCKS, NTP, IEEE 802.1X. More information on protocol usage available at www.axis.com **This product includes software developed by the Open SSL Project for use in the Open SSL Tool kit (www.openssl.org)*
Included accessories	Power supply 5.1 V DC, mounting and connector kits, Installation Guide, CD with User's manual, demo software, installation and management tools, licenses for 1 encoder and 1 decoder, decoder software for Windows
Video management software (not incl.)	AXIS Camera Station - Video management software for viewing, recording and archiving up to 25 cameras See www.axis.com/partner/adp_partners.htm for more software applications via partners
Accessories (not incl.)	Tamper-resistant casing with smoked transparent cover Vandal-resistant casing with smoked transparent cover Drop ceiling mount kit (AXIS 216MFD) Multi-user decoder license pack
Approvals	EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 55024, FCC Part 15 Subpart B Class B, ICES-003 Class B, VCCI Class B, C-tick AS/NZS CISPR 22, EN 60950 Power supply: EN 60950, UL, CSA
Dimensions (HxWxD) and weight	94 x 144 x 132 mm (3.7" x 5.7" x 5.2") AXIS 216MFD: 425 g (0.94 lb) AXIS 216MFD-V: 580 g (1.28 lb)

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